

0590

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OICE

RAW SEQUENCE LISTING  
PATENT APPLICATION: US/09/724,685

DATE: 10/24/2001  
TIME: 12:35:47

Input Set : A:\-85-6-1.app  
Output Set: N:\CRF3\10242001\I724685.raw

## SEQUENCE LISTING

ENTERED

## 4 (1) GENERAL INFORMATION:

6 (i) APPLICANT: Reed, Steven G.  
7 Skeiky, Yasir  
8 Dillon, Davin C.  
9 Campos-Neto, Antonio

11 (ii) TITLE OF INVENTION: Compounds and Methods for  
12 Immunotherapy and Diagnosis of Tuberculosis

14 (iii) NUMBER OF SEQUENCES: 155

16 (iv) CORRESPONDENCE ADDRESS:

17 (A) ADDRESSEE: Townsend and Townsend and Crew LLP  
18 (B) STREET: Two Embarcadero Center, Eighth Floor  
19 (C) CITY: San Francisco  
20 (D) STATE: California  
21 (E) COUNTRY: USA  
22 (F) ZIP: 94111-3834

24 (v) COMPUTER READABLE FORM:

25 (A) MEDIUM TYPE: Floppy disk  
26 (B) COMPUTER: IBM PC compatible  
27 (C) OPERATING SYSTEM: PC-DOS/MS-DOS  
28 (D) SOFTWARE: PatentIn Release #1.0, Version #1.30

30 (vi) CURRENT APPLICATION DATA:

C--> 31 (A) APPLICATION NUMBER: US/09/724,685  
C--> 32 (B) FILING DATE: 28-Nov-2000  
33 (C) CLASSIFICATION:

63 (vii) PRIOR APPLICATION DATA:

36 (A) APPLICATION NUMBER: US 08/523,436  
37 (B) FILING DATE: 01-SEP-1995  
40 (A) APPLICATION NUMBER: US 08/533,634  
41 (B) FILING DATE: 22-SEP-1995  
44 (A) APPLICATION NUMBER: US 08/620,874  
45 (B) FILING DATE: 22-MAR-1996  
48 (A) APPLICATION NUMBER: US 08/659,683  
49 (B) FILING DATE: 05-JUN-1996  
52 (A) APPLICATION NUMBER: US 08/680,574  
53 (B) FILING DATE: 12-JUL-1996  
56 (A) APPLICATION NUMBER: WO PCT/US96/14674  
57 (B) FILING DATE: 30-AUG-1996  
60 (A) APPLICATION NUMBER: US 08/730,511  
61 (B) FILING DATE: 11-OCT-1996  
64 (A) APPLICATION NUMBER: US 08/818,112  
65 (B) FILING DATE: 13-MAR-1997

67 (viii) ATTORNEY/AGENT INFORMATION:

68 (A) NAME: Bastian, Kevin L.  
69 (B) REGISTRATION NUMBER: 34,774  
70 (C) REFERENCE/DOCKET NUMBER: 014058-008561US

72 (ix) TELECOMMUNICATION INFORMATION:

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73      (A) TELEPHONE: (415) 576-0200
74      (B) TELEFAX: (415) 576-0300
77 (2) INFORMATION FOR SEQ ID NO: 1:
78      (i) SEQUENCE CHARACTERISTICS:
79          (A) LENGTH: 766 base pairs
80          (B) TYPE: nucleic acid
81          (C) STRANDEDNESS: single
82          (D) TOPOLOGY: linear
83      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:
84      CGAGGCACCG GTAGTTTGAA CCAAACGCAC AATCGACGGG CAAACGAACG GAAGAACACA      60
85      ACCATGAAGA TGGTGAAATC GATCGCCGCA GGTCTGACCG CCGCGGCTGC AATCGGCGCC      120
86      GCTGCGGCCG GTGTGACTTC GATCATGGCT GGC GGCCCGG TCGTATACCA GATGCAGCCG      180
87      GTCGTCTTCG GCGCGCCACT GCCGTTGGAC CCGGCATCCG CCCCTGACGT CCCGACCGCC      240
88      GCCCAGTTGA CCAGCCTGCT CAACAGCCTC GCCGATCCCA ACGTGTCTGTT TGCGAACAAG      300
89      GGCAGTCTGG TCGAGGGCGG CATCGGGGGC ACCGAGGCGC GCATCGCCGA CCACAAGCTG      360
90      AAGAAGGCCG CCGAGCACGG GGATCTGCCG CTGTCTGTTCA GCGTGACGAA CATCCAGCCG      420
91      GCGGCCGCCG GTTCGGCCAC CGCCGACGTT TCCGTCTCGG GTCCGAAGCT CTCGTGCGCC      480
92      GTCACGCAGA ACGTCACGTT CGTGAATCAA GGCGGCTGGA TGCTGTCACG CGCATCGGCG      540
93      ATGGAGTTGC TGCAGGCCGC AGGGNAACTG ATTGGCGGGC CGGNTTCAGC CCGCTGTTCA      600
94      GTACGCGCGC CCGCCTGGTG ACGCGTCCAT GTCGAACACT CGCGCGTGTA GCACGGTGCG      660
95      GTNTGCGCAG GGNCGCACGC ACCGCCCGGT GCAAGCCGTC CTCGAGATAG GTGGTGNCTC      720
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115      (i) SEQUENCE CHARACTERISTICS:
116          (A) LENGTH: 752 base pairs
117          (B) TYPE: nucleic acid
118          (C) STRANDEDNESS: single
119          (D) TOPOLOGY: linear
120      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
121      ATGCATCACC ATCACCATCA CGATGAAGTC ACGGTAGAGA CGACCTCCGT CTTCCGCGCA      60
122      GACTTCCTCA GCGAGCTGGA CGTCTCTGCG CAAGCGGGTA CGGAGAGCGC GGTCTCCGGG      120
123      GTGGAAGGGC TCCCGCCGGG CTCGGCGTTG CTGGTAGTCA AACGAGGCCC CAACGCCGGG      180
124      TCCCGGTTCC TACTCGACCA AGCCATCAGC TCGGCTGGTC GGCATCCCGA CAGCGACATA      240
125      TTTCTCGACG ACGTGACCGT GAGCCGTCGC CATGCTGAAT TCCGGTTGGA AAACAACGAA      300
126      TTCAATGTCG TCGATGTCGG GAGTCTCAAC GGCACCTACG TCAACCGCGA GCCCGTGGAT      360
127      TCGGCGGTGC TGGCGAACGG CGACGAGGTC CAGATCGGCA AGCTCCGGTT GGTGTTCTTG      420
128      ACCGGACCCA AGCAAGGCGA GGATGACGGG AGTACCGGGG GCCCGTGAGC GCACCCGATA      480
129      GCCCCGCGCT GGCCGGGATG TCGATCGGGG CGGTCTCCG ACCTGCTACG ACCGGATTTT      540
130      CCCTGATGTC CACCATCTCC AAGATTCGAT TCTTGGGAGG CTTGAGGGTC NGGGTGACCC      600
131      CCCC CGGGC CTCATTNCGG GGTNTCGGCN GGTTTCACCC CNTACCNACT GCCNCCCGGN      660
132      TTGCNAATTC NTTCTTCNCT GCCCNAAAG GGACCNTTAN CTTGCCGCTN GAAANGGTNA      720
133      TCCNGGGCCC NTCCTNGAAN CCCNTCCCC CT      752
151 (2) INFORMATION FOR SEQ ID NO: 3:
152      (i) SEQUENCE CHARACTERISTICS:
153          (A) LENGTH: 813 base pairs
154          (B) TYPE: nucleic acid
155          (C) STRANDEDNESS: single
156          (D) TOPOLOGY: linear
157      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:

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163 CCACGCGACA CCGGGCCCGA TCGATCTGCT AGCTTGAGTC TGGTCAGGCA TCGTCGTCAG      120
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167 GCGGCCGGCG GTGCTGCAAA CTACTCCCGG AGGAATTTTCG ACGTGCGCAT CAAGATCTTC      240
169 ATGCTGGTCA CGGCTGTCGT TTTGCTCTGT TGTTTCGGGTG TGGCCACGGC CGGCCCAAG      300
171 ACCTACTGCG AGGAGTTGAA AGGCACCGAT ACCGGCCAGG CGTGCCAGAT TCAAATGTCC      360
173 GACCCGGCCT ACAACATCAA CATCAGCCTG CCCAGTTACT ACCCCGACCA GAAGTCGCTG      420
175 GAAAATTACA TCGCCAGAC GCGCGACAAG TTCCTCAGCG CGGCCACATC GTCCACTCCA      480
177 CGCGAAGCCC CCTACGAATT GAATATCACC TCGGCCACAT ACCAGTCCGC GATACCGCCG      540
179 CGTGGTACGC AGGCCGTGGT GCTCAMGGTC TACCACAACG CCGGCGGCAC GCACCCAACG      600
181 ACCACGTACA AGGCCTTCGA TTGGGACCAG GCCTATCGCA AGCCAATCAC CTATGACACG      660
183 CTGTGGCAGG CTGACACCGA TCCGCTGCCA GTCGTCTTCC CCATTGTTGC AAGGTGAACT      720
185 GAGCAACGCA GACCGGGACA ACWGGTATCG ATAGCCGCCN AATGCCGGCT TGGAACCCNG      780
187 TGAAATTATC ACAACTTCGC AGTCACNAAA NAA      813
190 (2) INFORMATION FOR SEQ ID NO: 4:
192     (i) SEQUENCE CHARACTERISTICS:
193         (A) LENGTH: 447 base pairs
194         (B) TYPE: nucleic acid
195         (C) STRANDEDNESS: single
196         (D) TOPOLOGY: linear
198     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
200 CGGTATGAAC ACGGCCGCGT CCGATAACTT CCAGCTGTCC CAGGGTGGGC AGGGATTTCGC      60
202 CATTCCGATC GGGCAGGCGA TGGCGATCGC GGGCCAGATC CGATCGGGTG GGGGGTCACC      120
204 CACCGTTCAT ATCGGGCCTA CCGCCTTCCT CGGCTTGGGT GTTGTCGACA ACAACGGCAA      180
206 CGGCGCACGA GTCCAACGCG TGGTCGGGAG CGCTCCGGCG GCAAGTCTCG GCATCTCCAC      240
208 CGGCGACGTG ATCACC GCG TCGACGGCGC TCCGATCAAC TCGGCCACCG CGATGGCGGA      300
210 CGCGCTTAAC GGGCATCATC CCGGTGACGT CATCTCGGTG AACTGGCAAA CCAAGTCGGG      360
212 CGGCACGCGT ACAGGGAACG TGACATTGGC CGAGGGACCC CCGGCCTGAT TTCGTCGYGG      420
214 ATACCACCCG CCGGCCGGCC AATTGGA      447
217 (2) INFORMATION FOR SEQ ID NO: 5:
219     (i) SEQUENCE CHARACTERISTICS:
220         (A) LENGTH: 604 base pairs
221         (B) TYPE: nucleic acid
222         (C) STRANDEDNESS: single
223         (D) TOPOLOGY: linear
225     (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
227 GTCCCACTGC GGTGCGCGAG TATGTCGCCC AGCAAATGTC TGGCAGCCGC CCAACGGAAT      60
229 CCGGTGATCC GACGTCGCAG GTTGTCGAAC CCGCCGCCGC GGAAGTATCG GTCCATGCCT      120
231 AGCCCGGCGA CGGCGAGCGC CGGAATGGCG CGAGTGAGGA GGCGGGCAAT TTGGCGGGGC      180
233 CCGGCGACGG NGAGCGCCGG AATGGCGCGA GTGAGGAGGT GGNACATCAT GCCCAGNGTG      240
235 ATCCAATCAA CCTGNATTCG GNCTGNNGGN CCATTGACA ATCGAGGTAG TGAGCGCAAA      300
237 TGAATGATGG AAAACGGGNG GNGACGTCCG NTGTTCTGGT GGTGNTAGGT GNCTGNCTGG      360
239 NGTNGNGGNT ATCAGGATGT TCTTCGNCGA AANCTGATGN CGAGGAACAG GGTGTNCCCG      420
241 NNANNCCNAN GGNGTCCNAN CCCNNNTTCC TCGNCGANAT CANANAGNCG NTTGATGNGA      480
243 NAAAAGGGTG GANCAGNNNN AANTNGNGN CCNAANAANC NNNANNGNNG NNAGNTNGNT      540
245 NNTNTTNNC ANNNNNNTG NNGNNGNCCN NNNCAANCNN NTNNNGNAA NNGGNTTNTT      600
247 NAAT      604
250 (2) INFORMATION FOR SEQ ID NO: 6:
252     (i) SEQUENCE CHARACTERISTICS:

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Input Set : A:\-85-6-1.app

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253      (A) LENGTH: 633 base pairs
254      (B) TYPE: nucleic acid
255      (C) STRANDEDNESS: single
256      (D) TOPOLOGY: linear
258      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
260 TTGCANGTCG AACCACCTCA CTAAAGGGAA CAAAAGCTNG AGCTCCACCG CGGTGGCGGC      60
262 CGCTCTAGAA CTAGTGKATM YYYCKGGCTG CAGSAATYCG GYACGAGCAT TAGGACAGTC      120
264 TAACGGTCCT GTTACGGTGA TCGAATGACC GACGACATCC TGCTGATCGA CACCGACGAA      180
266 CGGGTGCAGG CCCTCACCTT CAACCGGCCG CAGTCCCGYA ACGCGCTCTC GGCGGCGCTA      240
268 CGGGATCGGT TTTTCGCGGY GTTGGYCGAC GCCGAGGYCG ACGACGACAT CGACGTCGTC      300
270 ATCCTCACCG GYGCCGATCC GGTGTTCTGC GCCGGACTGG ACCTCAAGGT AGCTGGCCGG      360
272 GCAGACCGCG CTGCCGACA TCTACCGCG GTGGGCGGCC ATGACCAAGC CGGTGATCGG      420
274 CGCGATCAAC GGCGCCGCGG TCACCGGCGG GCTCGAACTG GCGCTGTACT GCGACATCCT      480
276 GATCGCCTCC GAGCAGCCCC GCTTCGNCGA CACCCACGCC CGGGTGGGGC TGCTGCCCCA      540
278 CTGGGGACTC AGTGTGTGCT TGCCGCAAAA GGTCGGCATC GGNCTGGGCC GGTGGATGAG      600
280 CCTGACCGGC GACTACCTGT CCGTGACCGA CGC      633
283 (2) INFORMATION FOR SEQ ID NO: 7:
285      (i) SEQUENCE CHARACTERISTICS:
286          (A) LENGTH: 1362 base pairs
287          (B) TYPE: nucleic acid
288          (C) STRANDEDNESS: single
289          (D) TOPOLOGY: linear
291      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
293 CGACGACGAC GGCGCCGGAG AGCGGGCGCG AACGGCGATC GACGCGGCC TGGCCAGAGT      60
295 CGGCACCACC CAGGAGGGAG TCGAATCATG AAATTTGTCA ACCATATTGA GCGCGTCGCG      120
297 CCGCGCCGAG CCGGCGGCGC GGTGCGCGAG GTCTATGCCG AGGCGCGCCG CGAGTTCGGC      180
299 CGGCTGCCCC AGCCGCTCGC CATGCTGTCC CCGGACGAGG GACTGCTCAC CGCCGGCTGG      240
301 GCGACGTTGC GCGAGACACT GCTGGTGGGC CAGGTGCCGC GTGGCCGCAA GGAAGCCGTC      300
303 GCCGCCGCCG TCGCGGCCAG CCTGCGCTGC CCCTGGTGCG TCGACGCACA CACCACCATG      360
305 CTGTACGCGG CAGGCCAAAC CGACACCGCC GCGGCGATCT TGGCCGGCAC AGCACCTGCC      420
307 GCCGGTGACC CGAACGCGCC GTATGTGGCG TGGGCGGCAG GAACCGGGAC ACCGGCGGGA      480
309 CCGCCGGCAC CGTTCGGCCC GGATGTCGCC GCCGAATACC TGGGCACCGC GGTGCAATTC      540
311 CACTTCATCG CACGCCTGGT CCTGGTGCTG CTGGACGAAA CCTTCCTGCC GGGGGGCCCC      600
313 CGCGCCCAAC AGCTCATGCG CCGCGCCGGT GGAAGTGTGT TCGCCCGCAA GGTGCGCGCG      660
315 GAGCATCGGC CGGGCCGCTC CACCCGCGCG CTCGAGCCGC GAACGCTGCC CGACGATCTG      720
317 GCATGGGCAA CACCGTCCGA GCCCATAGCA ACCGCGTTCG CCGCGCTCAG CCACCACCTG      780
319 GACACCGCGC CGCACCTGCC GCCACCGACT CGTCAGGTGG TCAGGCGGGT CGTGGGGTCG      840
321 TGGCACGGCG AGCCAATGCC GATGAGCAGT CGCTGGACGA ACGAGCACAC CGCCGAGCTG      900
323 CCGCGCCGACC TGCACGCGCC CACCCGTCTT GCCCTGCTGA CCGGCCTGGC CCGCATCAG      960
325 GTGACCGACG ACGACGTCGC CGCGGCCCGA TCCCTGCTCG ACACCGATGC GGCGCTGGTT      1020
327 GGCGCCCTGG CCTGGGCGCG CTTCACCGCC GCGCGGCGCA TCGGCACCTG GATCGGCGCC      1080
329 GCCGCCGAGG GCCAGGTGTC GCGGCAAAAC CCGACTGGGT GAGTGTGCGC GCCCTGTGCG      1140
331 TAGGGTGTCA TCGCTGGCCC GAGGGATCTC GCGGCGGCGA ACGGAGGTGG CGACACAGGT      1200
333 GGAAGCTGCG CCCACTGGCT TCGGCCCCAA CGCCGTCGTG GCGGTTGGT TGGCCGCACT      1260
335 GGCCGATCAG GTCGGCGCCG GCCCTTGCC GAAGGTCCAG CTCAACGTGC CGTCACCGAA      1320
337 GGACCGGACG GTCACCGGGG GTCACCCTGC GCGCCAAGG AA      1362
340 (2) INFORMATION FOR SEQ ID NO: 8:
342      (i) SEQUENCE CHARACTERISTICS:
343          (A) LENGTH: 1458 base pairs

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344      (B) TYPE: nucleic acid
345      (C) STRANDEDNESS: single
346      (D) TOPOLOGY: linear
348      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
350 GCGACGACCC CGATATGCCG GGCACCGTAG CGAAAGCCGT CGCCGACGCA CTCGGGCGCG      60
352 GTATCGCTCC CGTTGAGGAC ATTCAGGACT GCGTGAGGCG CCGGCTGGGG GAAGCCGGTTC      120
354 TGGATGACGT GGCCCGTGTT TACATCATCT ACCGGCAGCG GCGCGCCGAG CTGCGGACGG      180
356 CTAAGGCCTT GCTCGGCGTG CGGGACGAGT TAAAGCTGAG CTTGGCGGCC GTGACGGTAC      240
358 TGC GCGAGCG CTATCTGCTG CACGACGAGC AGGGCCGGCC GGCCGAGTCG ACCGGCGAGC      300
360 TGATGGACCG ATCGGCGCGC TGTGTCGCGG CGGCCGAGGA CCAGTATGAG CCGGGCTCGT      360
362 CGAGGCGGTG GGCCGAGCGG TTCGCCACGC TATTACGCAA CCTGGAATTC CTGCCGAATT      420
364 CGCCACGTT GATGAACCTT GGCACCGACC TGGGACTGCT CGCCGGCTGT TTTGTTCTGC      480
366 CGATTGAGGA TTCGCTGCAA TCGATCTTTG CGACGCTGGG ACAGGCCGCC GAGCTGCAGC      540
368 GGGCTGGAGG CGGCACCGGA TATGCGTTCA GCCACCTGCG ACCCGCCGGG GATCGGGTGG      600
370 CCTCCACGGG CGGCACGGCC AGCGGACCGG TGTCGTTTCT ACGGCTGTAT GACAGTGCCG      660
372 CGGGTGTGGT CTCCATGGGC GGTGCGCGGC GTGGCGCCTG TATGGCTGTG CTTGATGTGT      720
374 CGCACCCGGA TATCTGTGAT TTCGTACCG CCAAGGCCGA ATCCCCAGC GAGCTCCCGC      780
376 ATTTCAACCT ATCGGTTGGT GTGACCGAGC CGTTCCTGCG GGCCGTCGAA CGCAACGGCC      840
378 TACACCGGCT GGTCAATCCG CGAACCGGA AGATCGTCGC GCGGATGCCC GCCGCCGAGC      900
380 TGTTCGACGC CATCTGCAAA GCCGCGCACG CCGGTGGCGA TCCCGGGCTG GTGTTTCTCG      960
382 ACACGATCAA TAGGGCAAAC CCGGTGCCGG GGAGAGGCCG CATCGAGGCG ACCAACCCGT      1020
384 GCGGGGAGGT CCCACTGCTG CCTTACGAGT CATGTAATCT CGGCTCGATC AACCTCGCCC      1080
386 GGATGCTCGC CGACGGTCGC GTCGACTGGG ACCGGCTCGA GGAGGTCGCC GGTGTGGCGG      1140
388 TGCGGTTTCT TGATGACGTC ATCGATGTCA GCCGCTACCC CTTCCCCGAA CTGGGTGAGG      1200
390 CGGCCCGCGC CACCCGCAAG ATCGGGCTGG GAGTCATGGG TTTGGCGGAA CTGCTTGCCG      1260
392 CACTGGGTAT TCCGTACGAC AGTGAAGAAG CCGTGCGGTT AGCCACCCGG CTCATGCGTC      1320
394 GCATACAGCA GGCGGCGCAC ACGGCATCGC GGAGGCTGGC CGAAGAGCGG GGCGCATTCC      1380
396 CGGCGTTTAC CGATAGCCGG TTCGCGCGGT CGGGCCCCGAG GCGCAACGCA CAGGTCACCT      1440
398 CCGTCGCTCC GACGGGCA                                     1458
401 (2) INFORMATION FOR SEQ ID NO: 9:
403      (i) SEQUENCE CHARACTERISTICS:
404          (A) LENGTH: 862 base pairs
405          (B) TYPE: nucleic acid
406          (C) STRANDEDNESS: single
407          (D) TOPOLOGY: linear
409      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
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413 GGCGCAGGGG GCTGGCCCTG GGCATCGCGG TCGTCGTAGT CGGGATCGCG GTGGCCATCG      120
415 TCATCGCCTT CGTCGACAGC AGCGCCGGTG CCAAACCGGT CAGCGCCGAC AAGCCGGCCT      180
417 CCGCCCAGAG CCATCCGGGC TCGCCGGCAC CCAAGCACC CCAGCCGGCC GGGCAAACCG      240
419 AAGGTAACGC CGCCGCGGCC CCGCCGAGG GCCAAAACCC CGAGACACCC ACGCCACCG      300
421 CCGCGGTGCA GCCGCGCCCG GTGCTCAAGG AAGGGGACGA TTGCCCCGAT TCGACGCTGG      360
423 CCGTCAAAGG TTTGACCAAC GCGCCGAGT ACTACGTCGG CGACCAGCCG AAGTTACCA      420
425 TGGTGGTCAC CAACATCGGC CTGGTGTCTT GTAAACGCGA CGTTGGGGCC GCGGTGTTGG      480
427 CCGCCTACGT TTA CTGCTG GACAACAAGC GGTTGTGGTC CAACCTGGAC TGC GCGCCCT      540
429 CGAATGAGAC GCTGGTCAAG ACGTTTTCCC CCGGTGAGCA GGTAACGACC GCGGTGACCT      600
431 GGACCGGGAT GGGATCGGCG CCGCGCTGCC CATTGCCGCG GCCGGCGATC GGGCCGGGCA      660
433 CCTACAATCT CGTGGTACAA CTGGGCAATC TGCGCTCGCT GCCGGTTCCG TTCATCTGA      720
435 ATCAGCCGCC GCCGCCGCC GGGCCGGTAC CCGTCCGGG TCCAGCGCAG GCGCCTCCG      780

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Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

old format  
O.K.

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/724,685

DATE: 10/24/2001

TIME: 12:35:48

Input Set : A:\-85-6-1.app

Output Set: N:\CRF3\10242001\I724685.raw

L:31 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:].

L:32 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]

L:1894 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:54  
L:1955 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58  
L:1969 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59  
L:1999 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61  
L:2063 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63  
L:2151 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65  
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